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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,604	10/26/2001	Antti Huima	SSH-001	3832

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EXAMINER

NGUYEN, THUONG

ART UNIT PAPER NUMBER

2155

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,604	HUIMA, ANTTI	
	Examiner	Art Unit	
	Thuong (Tina) T. Nguyen	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 12-14, 16-20, 22-28 and 30 is/are rejected.
- 7) ☒ Claim(s) 6-9, 11, 15, 21, 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/26/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to application 10/035,604 filed 10/26/01. Claims 1-30 are pending and represent method, computer program software, computer network and system for method for managing compiled filter code.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 12, 17, 18 and 26 provides for the use of processing data packets, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1, 12, 17, 18 and 26 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 10, 12-13, 16-19, and 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Stack Patent No. 6,257,774 B1. Stack teaches the invention as claimed including application program and documentation generator system and method (see abstract).

6. As to claim 1, Stack teaches a method for managing compiled filter code for processing data packets wherein compiled filter code is managed in a plurality of pieces (figure 1 & 3; col 5, lines 43 – col 6, lines 16; col 10, lines 27-61; Stack discloses the method of divided the program rules or code into many sub-programs, segments, files and records).

7. As to claim 2, Stack teaches a method as recited in claim 1 comprising the steps of:

incrementally compiling at least one rule for obtaining a piece of code by a rule compiling entity (col 7, lines 14-46; Stack discloses the method of compiling the program rule begins at a logical root rule and proceeds through the ordered set of rules),

transmission of said piece of filter code from a rule compiling entity to a packet processing entity (figure 2 & 4; Stack discloses the method of transmission the program code or rule by the rule table, control table and process sequences),

pausing of processing of packets by said packet processing entity (col 8, lines 5-23; Stack discloses the method of processing the syntax rule that specify higher level functions or required different operations in the generation of the code or by user defined; Therefore, the system would pause or run according to the user's preferences),

writing of said piece of filter code to memory means (col 8, lines 24-40; Stack discloses the method of storing the program code to the memory or storage), and

continuing of processing of packets by said packet processing entity (col 14, table I; Stack discloses the method of defining the next segment accordingly; Therefore, the program would run or stop depend on user's preferences or setting).

8. As to claim 3, Stack teaches a method as recited in claim 1 comprising the steps of:

incrementally compiling at least one rule for obtaining a piece of code by a rule compiling entity (col 7, lines 14-46; Stack discloses the method of compiling the program rule begins at a logical root rule and proceeds through the ordered set of rules),

signaling from said rule compiling entity to a packet processing entity that a new piece of code is compiled (col 14, table I; col 21, table II; Stack discloses the method of popup the call or display according to the user's preferences or setting),

signaling from said packet processing entity to said rule compiling entity that said packet processing entity is ready for storage of said piece of code (col 14, table I; col 21, table II; Stack discloses the method of popup the call or display according to the user's preferences or setting),

writing said piece of code to a memory means (col 8, lines 24-40; Stack discloses the method of storing the program code to the memory or storage), and

signaling from said rule compiling entity to said packet processing entity that said piece of code is written to said memory means (col 16, table II; Stack discloses the method of popup the call or display according to the user's preferences or setting).

9. As to claim 4, Stack teaches a method as recited in claim 1 wherein said pieces are pages having a predetermined length (col 12, lines 49-65; Stack discloses the method of setting the record size or predetermined capacity of the program).

10. As to claim 10, Stack teaches a method as recited in claim 4 wherein each page of code is associated with a reference number for observing the order of the code pages (col 10, lines 16-26; col 11, lines 50 – col 12, lines 48; Stack discloses the method of running the program sequences and orderly).

11. As to claim 12, Stack teaches a computer software program product for processing data packets based on compiled filter code comprising computer program code means for managing the compiled filter code in a plurality of pieces (figure 1 & 3; col 5, lines 43 – col 6, lines 16; col 10, lines 27-61; Stack discloses the computer software program of divided the program rules or code into many sub-programs, segments, files and records).

12. As to claim 13, Stack teaches a computer software program product as recited in claim 12 further comprising:

computer program code means for incrementally compiling at least one rule and for producing at least one piece of code (col 7, lines 14-46; Stack discloses the computer software program of compiling the program rule begins at a logical root rule and proceeds through the ordered set of rules), and

computer program code means for updating a memory means with said at least one piece of code (col 8, lines 23-40; col 21, table II; Stack discloses the computer software program of updating the form and the program code in the non-volatile storage medium).

13. As to claim 16, Stack teaches a computer software program product as recited in claim 12 wherein the computer software program product is a software routine library (figure 2).

14. Claim 17 do not teach or defined any new limitation above claims 1-11 and therefore is rejected for similar reasons.

15. As to claim 18, Stack teaches a computer network node for processing of data packets according to compiled filter code comprising means for managing the compiled filter code in a plurality of pieces (figure 1 & 3; col 5, lines 43 – col 6, lines 16; col 10, lines 27-61; Stack discloses the computer network node of divided the program rules or code into many sub-programs, segments, files and records).

16. As to claim 19, Stack teaches a computer network node as recited in claim 18 further comprising:

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means for incrementally compiling at least one rule and for producing at least one piece of code (col 7, lines 14-46; Stack discloses the computer network node of compiling the program rule begins at a logical root rule and proceeds through the ordered set of rules), and

means for updating a memory means with said at least one piece of code (col 8, lines 23-40; col 21, table II; Stack discloses the computer network node of updating the form and the program code in the non-volatile storage medium).

17. As to claim 26, Stack teaches a system for processing of data packets according to compiled filter code comprising means for managing the compiled filter code in a plurality of pieces (figure 1 & 3; col 5, lines 43 – col 6, lines 16; col 10, lines 27-61; Stack discloses the system of divided the program rules or code into many sub-programs, segments, files and records).

18. As to claim 27, Stack teaches a system as recited in claim 26 comprising:

means for incrementally compiling a set of rules and for producing at least one piece of code (col 7, lines 14-46; Stack discloses the system of compiling the program rule begins at a logical root rule and proceeds through the ordered set of rules), and

means for updating a memory means with said at least one piece of code (col 8, lines 23-40; col 21, table II; Stack discloses the system of updating the form and the program code in the non-volatile storage medium).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 5, 14, 20, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stack, Patent No. 6,257,774 B1 in view of Herrell, Patent No. 5,301,287.

Stack teaches the invention substantially as claimed including application program and documentation generator system and method (see abstract).

21. As to claim 5, Stack teaches a method as recited in claim 4. But Stack failed to teach the claim limitation wherein shadow paging is used.

However, Herrell teaches user scheduled direct memory access using virtual addresses (see abstract). Herrell teaches the limitation wherein shadow paging is used (col 15, lines 38-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Herrell so that the program code runs without the necessity of executing instructions in the host processor. One would be motivated to do so to started running the program without further host processor intervention, and hence data transmission is handle without the need to execute further instructions in the host processor.

22. As to claim 14, Stack teaches a computer software program product as recited in claim 12. But Stack failed to teach the claim limitation wherein computer program code means for implementing shadow paging of pages of filter code.

However, Herrell teaches the limitation wherein computer program code means for implementing shadow paging of pages of filter code (col 15, lines 38-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Herrell so that the program code runs without the necessity of executing instructions in the host processor. One would be motivated to do so to started running the program without further host processor intervention, and hence data transmission is handle without the need to execute further instructions in the host processor.

23. As to claim 20, Stack teaches a computer network node as recited in claim 18. But Stack failed to teach the claim limitation wherein means for implementing shadow paging of pages of filter code.

However, Herrell teaches the limitation wherein means for implementing shadow paging of pages of filter code (col 15, lines 38-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Herrell so that the program code runs without the necessity of executing instructions in the host processor. One would be motivated to do so to started running the program without further host processor intervention, and hence data transmission is handle without the need to execute further instructions in the host processor.

24. As to claim 28, Stack teaches a system as recited in claim 26. But Stack failed to teach the claim limitation wherein means for implementing shadow paging of pages of filter code.

However, Herrell teaches the limitation wherein means for implementing shadow paging of pages of filter code (col 15, lines 38-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Herrell so that the program code runs without the necessity of executing instructions in the host processor. One would be motivated to do so to started running the program without further host processor intervention, and hence data transmission is handle without the need to execute further instructions in the host processor.

25. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stack, Patent No. 6,257,774 B1 in view of Wesinger, Patent No. 6,052,788.

Stack teaches the invention substantially as claimed including application program and documentation generator system and method (see abstract).

26. As to claim 22, Stack teaches a computer network node as recited in claim 18. But Stack failed to teach the claim limitation wherein the node is a virtual private network node.

However, Wesinger teaches firewall providing enhanced network security and user transparency (see abstract). Wesinger teaches the limitation wherein the node is a virtual private network node (figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Wesinger so that the system could process remotely. One would be motivated to do so to broaden the flexibility of the system.

27. As to claim 23, Stack teaches a computer network node as recited in claim 18. But Stack failed to teach the claim limitation wherein the node is a router node.

However, Wesinger teaches the limitation wherein the node is a router node (figure 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Wesinger so that the packet could transfer from one machine to another in the WAN network. One would be motivated to do so to connect over a wide geographical area via one or more dedicated connections.

28. As to claim 24, Stack teaches a computer network node as recited in claim 18. But Stack failed to teach the claim limitation wherein the node is a firewall node.

However, Wesinger teaches the limitation wherein the node is a firewall node (figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Wesinger so that the system would maintain the security for the system. One would be motivated to do so to ensured the security for the processing process.

29. As to claim 25, Stack teaches a computer network node as recited in claim 18. But Stack failed to teach the claim limitation wherein the node is a workstation.

However, Wesinger teaches the limitation wherein the node is a workstation (figure 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Wesinger so that the client could oversee what is going on between the systems. One would be motivated to do so to broaden the flexibility of the system.

30. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stack, Patent No. 6,257,774 B1 in view of Kloth, Patent No. 6,598,034 B1.

Stack teaches the invention substantially as claimed including application program and documentation generator system and method (see abstract).

31. As to claim 30, Stack teaches a system as recited in claim 26. But Stack failed to teach the claim limitation wherein a memory component having a first access port and a second access port, and means for processing data packets, said means for processing data packets being arranged to access said memory component via said first access port, and said means for managing the compiled filter code being arranged to access said memory component via said second access port.

However, Kloth teaches rule based IP data processing (see abstract). Kloth teaches the limitation wherein a memory component having a first access port and a second access port (figure 5), and means for processing data packets, said means for processing data packets being arranged to access said memory component via said first access port (figure 11), and said means for managing the compiled filter code being arranged to access said memory component via said second access port (figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stack in view of Kloth so that the system could processing the IP packets by dividing the packet into plurality pieces and process the packet one at a time by the communication protocol stack and the communications rule editor. One would be motivated to do so to broaden the flexibility of the system and applied the specific rule to specific packet to fasten the processing process.

Allowable Subject Matter

32. Claim 6-9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

33. Claim 11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

34. Claims 15, 21, & 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuong (Tina) Nguyen whose telephone number is 571-272-3864, and the fax number is 571-273-3864. The examiner can normally be reached on 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuong (Tina) Nguyen
Patent Examiner/Art Unit 2155


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER